Application No.: 10/586,768 Filing Date: July 20, 2006

Page: 2

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A process for preparing a) nitriles of the formula (II) and b) isonitriles of the formula (III)

$$R - C \equiv N$$
 (II) $R - N \equiv C$ (III)

said process comprising reacting

- a) carboxamides (RCO-NH2), ammonium salts of carboxylic acids (RCOO-NH4+) or carboxylic acids in the presence of ammonia or ammonium salts (RCOOH + NH3, RCOOH + NH4+) or
- b) formamides (H-CO-NHR) or mixtures of amines with formic acid, with cyclic phosphonic anhydrides with elimination of water at a temperature in the range from -30 to +120°C,

where R may have any substitution and is a linear or branched C_1 - C_8 -alkyl radical, a C_3 - C_{10} -cycloalkyl, alkenyl, alkynyl, phenyl or C_1 – C_4 -alkyl-phenyl or an aryl or heteroaryl radical.

2. (Currently Amended) The process as claimed in claim 1, wherein the cyclic phosphonic anhydride is a 2,4,6-substituted 1,3,5,2,4,6-trioxatriphosphinane 2,4,6-trioxide which is independently substituted with open-chain or branched, saturated or unsaturated, straight-chain C₁ to C₁₆-alkyl radicals or cyclic C₃ to C₁₆-alkyl radicals, or aryl or heteroaryl phenyl.

Application No.: 10/586,768 Filing Date: July 20, 2006

Page: 3

- 3. (Previously Presented) The process as claimed in claim 2, wherein the cyclic phosphonic anhydride is independently substituted with a methyl, ethyl, n-propyl, isopropyl, n-butyl, 2-butyl, isobutyl, pentyl, or hexyl radical.
- 4. (Original) The process as claimed in claim 2, wherein the cyclic phosphonic anhydride is propanephosphonic anhydride.
- 5. (Previously Presented) The process as claimed in claim 1, wherein the cyclic phosphonic anhydride is either a melt or dissolved in a solvent.
- 6. (Previously Presented) The process as claimed in claim 5, wherein the cyclic phosphonic anhydride is in an aprotic solvent.
- 7. (Previously Presented) The process as claimed in claim 1, wherein said process further comprises
 - (i) forming a reaction solution comprising carboxamides; ammonium salts of carboxylic acids; carboxylic acids in the presence of ammonia or ammonium salts; formamide; or mixtures of amines with formic acid;
 - (ii) adding cyclic phosphonic anhydride to the reaction solution; and
 - (iii) heating the reaction solution to reaction temperature,
 wherein the reaction solution is heated to the reaction temperature after
 addition of the phosphonic anhydride.
- 8. (Previously Presented) The process as claimed in claim 1, wherein nitriles are prepared and an ammonium salt together with a carboxylic acid (R-COOH) is reacted with the phosphonic anhydride in the presence of a base.
- 9. (Previously Presented) The process as claimed in claim 8, wherein the base is triethylamine, tripropylamine, benzyldimethylamine, N,N-dimethylamiline or pyridine.

Application No.: 10/586,768 Filing Date: July 20, 2006

Page: 4

- 10. (Currently Amended) The process as claimed in claim 2, wherein the cyclic phosphonic anhydride is independently substituted with an ethyl, propyl, and/ or butyl radical.
- 11. (Previously Presented) The process as claimed in claim 6, wherein the cyclic phosphonic anhydride and aprotic solvent are in a ratio of from 1:1 to 1:2.
- 12. (Currently Amended) A process for preparing a) nitriles of the formula (II) and b) isonitriles of the formula (III)

$$R - C \equiv N$$
 (II) $R - N \equiv C$ (III)

said process comprising reacting

- a) carboxamides (RCO-NH2), ammonium salts of carboxylic acids (RCOO-NH4+) or carboxylic acids in the presence of ammonia or ammonium salts (RCOOH + NH3, RCOOH + NH4+) or
- b) formamides (H-CO-NHR) or mixtures of amines with formic acid, with cyclic phosphonic anhydrides with elimination of water at a temperature in the range from -30 to +120°C,

where R may have any substitution and is a linear or branched C_1 - C_8 -alkyl radical, a C_3 - C_{10} -cycloalkyl, alkenyl, alkynyl, a phenyl or derivative thereof <u>p-methyl-phenyl</u>.